

presses. The cakes are then broken and grain-classified; the resulting granules are polished with the application of graphite.

When in granulated form, black powder can be freely poured into boreholes.

Black powder is sensitive to impact, friction, and sparks. It is suitable for controlled blastings in which the treatment of the stone must be mild — e.g., in the manufacture of roofing slates, and in quarrying for paving stones.

It is employed in making safety fuses, in pyrotechnics and in making priming charges for smokeless powders. It remains, even today, the only suitable explosive for many purposes. It rapidly builds up pressure in relatively weak confinement. It does not detonate under normal conditions; the maximum rate of the explosion is about 500 m/s.

#### **Blast Area\*)**

*Sprengbereich (Absperrzone); chantier de tir*

The area of a blast, including area immediately adjacent, within the influence of flying rock missiles.

#### **Blaster\*)**

*Sprengmeister; boutefeu*

That qualified person in charge of, and responsible for, the loading and firing of a blast (same as *shot firer*).

#### **Blasting Accessories\*)**

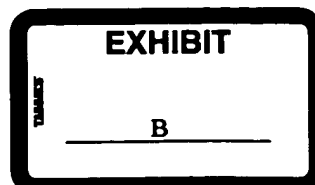
*Sprengzubehör; accessoires pour sautage*

Non-explosive devices and materials used in blasting, such as, but not limited to, cap crimpers, tamping bags, → *blasting machines, blasting galvanometers, and cartridge punches.*

#### **Blasting Agents**

The notion of a blasting agent was conceived in the USA. Contrary to high explosives, which may contain, say, nitroglycerin, and which

\* Text quoted from glossary.



are sensitive to blasting caps, the term "blasting agents" denotes relatively low-sensitive explosives, usually based on ammonium nitrate, which are insensitive to blasting caps and do not contain any high explosives such as nitroglycerin or TNT. In many countries (but not in the German Federal Republic) the safety regulations governing the transport and storage of blasting agents are considerably less severe than those applicable to high explosives. N.C.N. is designated in the USA as an ammonium nitrate non cap sensitive explosive. The components are named by *nitro*: dinitrotoluene; by *carbo*: solid carbon carriers as fuel; by *nitrate*: ammonium nitrate. Meanwhile, NCN as a shipping name has been removed by the US Department of Transportation and replaced by the shipping name "Blasting Agent". A blasting agent has to be non-cap-sensitive (→ *Cap Sensitivity*). → *ANFO* explosives and most of → *slurries* have to be classified under blasting agents.

### Blasting Caps

#### *Sprengkapseln; détonateurs*

Blasting caps serve as initiators of explosive charges. They consist of a cylindrical copper or aluminum capsule, containing a primary charge of an initiating explosive or a mixture of initiating explosives (e.g. lead azide with lead trinitroresorcinate); in order to achieve a higher brisance, they also contain a secondary charge of a high-brisance explosive (e. g. → *Tetryl*; → *PETN*; Cyclonite).

A blasting cap can be ignited by the flame of a safety fuse or electrically. In the past, 10 standard types of blasting caps were marketed; these differed from each other by the quantity of the explosive in the charge and by their size. By now, No. 8 blasting cap (0.3 g primary charge, 0.8 g secondary charge, 40—50 mm in length and 7.0 mm in external diameter) is, for all practical purposes, the main type of blasting cap on the market.

### Blasting Galvanometer

→ *Circuit Tester*.